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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,125	09/09/2003	Shigeru Morioka	Q77340	9208

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EXAMINER
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THEXTON, MATTHEW

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/657,125	<b>Applicant(s)</b> MORIOKA ET AL.	
	<b>Examiner</b> Matthew A. Thexton	<b>Art Unit</b> 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>one sheet</u> . | 6) <input type="checkbox"/> Other: ____.  |

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**DETAILED ACTION**

**35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claim Rejections - 35 USC § 103***

Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanford et al. (US 3446893) in view of Brennan et al (US 4149988) and/or Ota et al. (US 5021186).

Claim 1 is directed to compression molded mixtures comprising 4 ingredients: trichloroisocyanuric acid, sodium dichloroisocyanurate anhydrous salt, magnesium and/or aluminum sulfate, and calcium carbonate. Claims 3 and 4 depend from claim 1 and specify particle size limitations for some of the ingredients. Claim 5 depends from claim 1 and is directed to a process of making the product of claim 1 by "molding under compression."

Reference '893 discloses tabletted mixtures of 1) a solid source of available halogen, which may be trichloroisocyanuric acid or sodium dichloroisocyanurate (column 2, lines 65-72), 2) a solid gas-generating source, which may be calcium

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carbonate (column 4, lines 22-38), 3) a solid polyolefin, and a decomposition inhibiting additive (column 6, lines 6-15). Tableting is suggested and particle sizes are suggested with preference for finer (column 6, lines 41-59 and example XVI). The reference does not disclose a mixture of oxidants, the precise size limitations of claims 3 and 4, nor the decomposition additive of magnesium and/or aluminum sulfate.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed any combination of the suggested halogen sources since each is suggested as suitable. It would have been obvious to one of ordinary skill in the art at the time of the invention to have optimized the particle sizes given the suggestions noted.

Reference '988 discloses decomposition additive of magnesium sulfate for trichloroisocyanuric acid or sodium dichloroisocyanurate in tablet form (e.g., example 8).

Reference '186 discloses decomposition additive of aluminum sulfate for trichloroisocyanuric acid in tablet form (e.g., claims 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed the decomposition additive of magnesium and/or aluminum sulfate in the mixtures of reference '893 in order to obtain the decomposition (or storage stability) benefits disclosed by references '988 and '186.

***Allowable Subject Matter***

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art sustains a prima facie conclusion of obviousness for claim 1. claim 2 depends from claim 1 and further specifies proportions of the four listed ingredients which are commensurate in scope with the showing in the specification.

***Citation of Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kibbel, Jr. et al. (US 3873685) discloses layered tablets of trichloroisocyanuric acid and sodium dichloroisocyanurate dihydrate which provides rapid and slow dissolving chlorine release agents. There is no suggestion to employ anhydrous sodium dichloroisocyanurate.

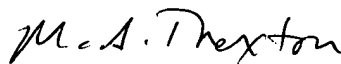
***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Thexton whose telephone number is 571-272-1125. The examiner can normally be reached on Monday-Friday, 9:30 to 6.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S. Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Matthew A. Thexton  
Primary Examiner  
Art Unit 1714